

FLUIDIC ACTUATION FOR IMPROVED DIFFUSER PERFORMANCE

Abstract of the Disclosure

A diffuser includes an opening along the diffuser wall for preventing or delaying boundary layer separation of the main flow. The opening may include a curved passageway having a curvature convex relative to the main flow for utilizing the Coanda effect. A gas turbine may include the diffuser with an opening and a centerbody with an opening, each for providing a secondary flow of fluid into the diffuser. The gas turbine may direct fluid from an upstream turbine stage to the opening. A steam turbine may include the diffuser and may situate the opening downstream the diffuser inlet but upstream the location of boundary separation.

Figures